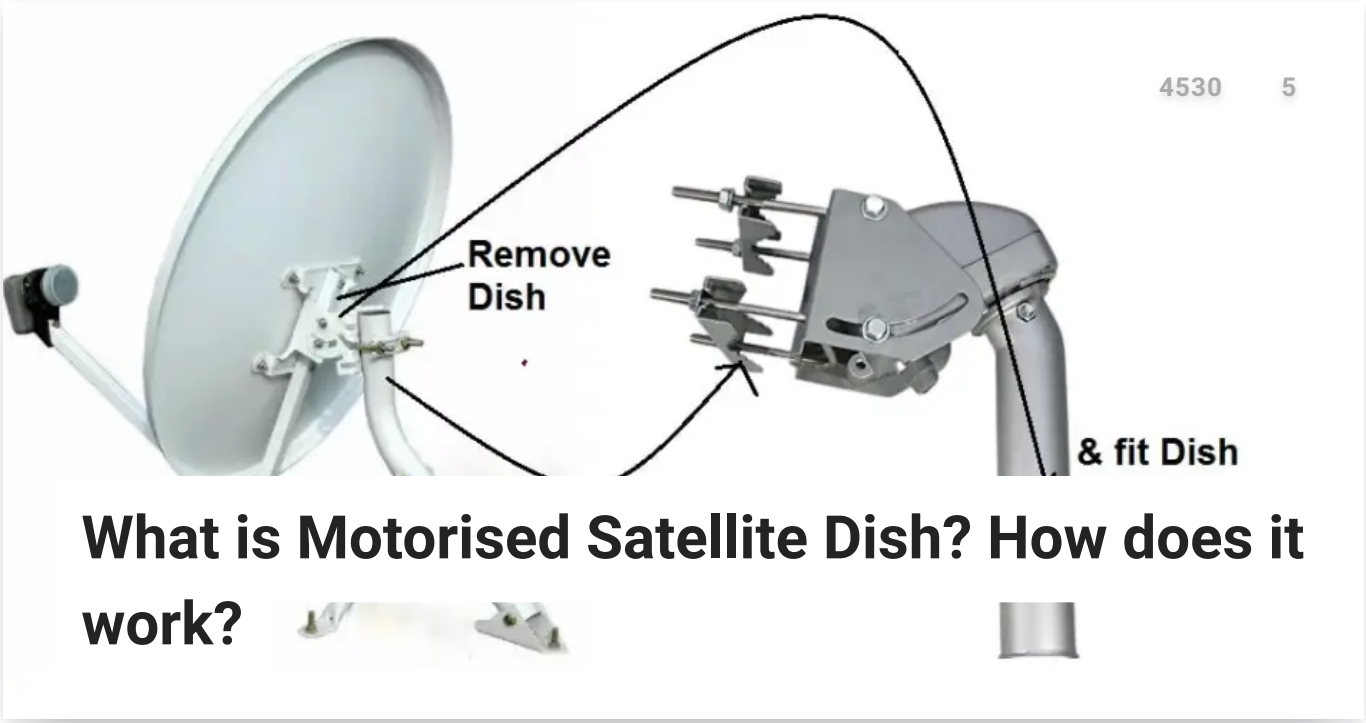

What is Motorised Satellite Dish? How does it work?

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★★★★★ 3.9 (8)

Motorised Satellite dish – Most people installed a Ku-Band DTH antenna towards DD Free dish satellite (GSAT 15). But If you are not happy with the only DD Free dish TV channels or If you want to access different-2 satellites for tracking and channels purpose then you can install a dish positioner system with your DTH antenna.

WITH this H-H Motor (Motorised Satellite dish), you can move your dish, via the receiver to receive the signal of any satellite channel in your area. You no need to install so many dishes. It will save you money and roof space.

Installing a motorized satellite antenna is very simple, you need some tricks to set with it your current DTH antenna. You no need to purchase a different DTH antenna to convert a normal DTH antenna to a Motorised antenna.

You can just follow these steps to install the motor or actuator with your satellite Dish antenna.

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Why should you install a motorized satellite dish?

You can install a Motorized Satellite Dish Positioners with an antenna if –

If you have a DTH service center or shop, then if you want a signal or services from different-2 satellite (Different-2 signals for all DTH services) then you should install a dish positioner with your antenna.

If you want to receive extra free-to-air TV channels including free-to-air TV channels then you can install a motor.

but keep remembering, you may face some problems by installing a motor as –

It takes 10-30 seconds to rotate your dish antenna to target and lock the satellite signals.

In the rainy season, it may have problems targeting and lock satellite signals.

But still, you are looking to install then will check further process.
First, we will buy a dish positioner system (Satellite motor system), We can buy it at Rs.4000-6000, it depends on quality and brand.

The solid brand is also launching a satellite motor for the Ku-band dish antenna. You can check their official website.

Although this motor also available on Amazon, you can check here.

You will get the following products with the package, once you get the delivery of the order.
1 – Motor with tube
2 – Bracket
3 – Bracket Hardware (Two U type clamps)
5 – User Manual

How to Install a Satellite Dish Positioners (Motor)?

Necessary tools required:

1 Satellite dish

2 Screw and fixing

3 Offset arm

4 Universal LNB

5 H Type or U Type Clamps

6 Satellite receiver

7 TV set

8 Scart lead male/male 21 pin

9 «F» plug

10 coaxial Cable as required length

11 Satellite DiSEqC Motor

Now you can make a connection between Set-Top Box >> Motor >> LNB, as showing below picture. You can find the manual with the package with complete instructions.

Installing the Mount –

First Install the main pole to a 90-degree position, which means 100% vertical so that you can get an accurate reading. Once complete you will need to attach the pole using U clamps which you have received with the package.

Now connect your motor with U Clamp which is connected with pol. You can remove your antenna from the current installation and fit it as showing below picture.

1. Assemble the H-H mount as the following diagram.

2. Make sure the mounting tube indicates 0 degrees, otherwise driver the mounting tube (2) to exact 0 degrees via the manual buttons on
the bottom of the mount (make sure you have connected the motor with the receiver that is switched on).
3. Make sure the mounting pole is exactly vertical before the installation of the motor.
4. Fix the H-H Mount onto the mounting pole of the stand and tighten the two U-Screws (4) by the clamp (6) and nut (5) evenly. Make sure there is no obstacle in the southern sky, such as a tree or building.

Alignment of the Mount –

1. Aiming True South –

Attaching the antenna dish to the mount, make sure it is at the center of the mounting tube. Now rotate the mount together with the antenna toward TRUE SOUTH. You can find the TRUE SOUTH via the magnetic variation table and a compass that indicates the MAGNETIC

SOUTH.

2. Setting Elevation Angle (A)

Now adjust the motor elevation angle via the inclinometer or the Elevation / Latitude scale on both sides of the Motor according to the

Latitude of your position.

3. Setting Declination Angle (B)

find the Declination Angle by the attached ANGLE TABLE.
Set the Declination Angle by the scale on the Antenna dish. The reading on the antenna scale should be 35 degrees DECLINATION ANGLE.

4. Drive the antenna east and west via the manual buttons on the bottom of the Mount to check if the reception arc is correct. if not, adjust the direction, elevation, and declination angle to find the best reception.

Please note: In order to have the power to drive the antenna, please connect the mount to the receiver or interface box via coaxial cable first.

Diseqc 1.2 Operation –

The DiSEqC motor is designed for DiSEqC 1.2 Receiver. The commands of the receiver might be different, but similar, Please refer to the manual of the DiSEqC 1.2 receiver.

1. Go East / West: Drive the antenna East to West.
2. Fine Tune East / West Drive the antenna East / West for one step.
3. Store nn: Store satellites position nn (01-60)
4. Goto nn: Drive Motor to satellite position nn (01-60)
5. Re-synchronize / Shift

(a) Drive the motor to a position by Goto command.

(b) Drive the motor East / West to a better position like a GSAT 15 at 63.5 degrees east.

(c) Send Re-synchronize commands to the motor. The original position will be shifted to a new position. All the other Satellite positions are also changed.

Goto X Function (USALS) –

1. See your receiver's manual and select the type of installation in the Goto X (USALS) mode.
2. Fill in the empty spaces in the receiver's menu with the Latitude and Longitude values. When the values have been correctly received, the receiver drives the Motor to the calculated position.
3. Slightly rotate clockwise or anticlockwise the antenna and the Motor locked together until you find an image on the TV screen connected to the receiver or the signal on the strength field meter, and then tighten the fixing screws.

LED Indicator in Motor –

The 2 LED indicators on the bottom of the motor can show the following information :

Power on – LED1 & LED2 keeps blinking every 2 seconds.

Drive EAST – LED1 Blinking 1 time

Drive WEST – LED2 blinking 1 time

Halt – LED1 & LED2 blinking 1 time

Store – LED1 blinking 2 times

East Limit – LED1 Blinking 3 times

West Limit – LED2 Blinking 3 times

Limit Off – LED1 & LED2 blinking 3 times

Goto X – LED1 & LED2 blinking 4 times

Stop East Limit – LED1 keep blinking

Stop West Limit – LED2 Keep blinking

Hardware Reset By Receiver –

1. Execute the command of Go-To Reference (Go to “0”)
2. Cut off the power by unconnected Coaxial cable.
3. Connect Coaxial cable
4. Execute the command of Shift “0”. Then, memory erased, re-writes the satellite table to the initial one, and corrects the “0”.

Hardware Reset by Diseqc Motor –

1. Cut off the power by unconnected Coaxial cable
2. Keep press both of the EAST / WEST buttons at the same time for 5 seconds.
3. Connect Coaxial cable
4. LED1 and LED2 keep blinking for 5 seconds. Then, memory erased, the DiSEqC motor goes back to the “0” degree and rewrites the satellite table to the initial one.

Built-in Satellite Table Reset –

1. Keep press both of the EAST / WEST buttons at the same time for 5 seconds.

2. LED1 and LED2 keep blinking for 5 seconds. Then, memory erased, the DiSEqC motor goes back to the “0” degree and rewrites the satellite table to the initial one.

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